

CREATING AND SUSTAINING RN VENTILATOR/TRACHEOSTOMY COMPETENCY: A COLLABORATIVE APPROACH

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PROBLEM

No evidence-based nursing competency for care of Vent/Trach patients



OBJECTIVE

**Nurses will be
competent and
confident in caring for
vent/trach patients**

STRATEGY



- ▶ Interdisciplinary workgroup:
 - ▶ 5D Charge RN
 - ▶ 5D's two Clinical Nurse Leaders
 - ▶ Respiratory Therapy Care Coordinator
 - ▶ CCU Clinical Nurse Specialist

- ▶ Evidence-based, interactive in-service

Portland VA
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STRATEGY CONTINUED

- ▶ *The vent/trach in-service included:*
 - ▶ Pre/Post Questionnaire
 - ▶ PowerPoint
 - ▶ Hands-on, interactive
 - ▶ Intermittent mini “Quiz”



1. Is the trachea located in the upper or lower respiratory tract?
2. What is the critical function of Ventilation?
3. What is the normal range for cuff pressure?
4. What must be done before Passy Muir valve is applied to the patient?
5. True or False: Cuff must be inflated when on ventilator.
6. How often should the suction system be changed?
7. What is the maximum suction time during each pass?
8. The (color)_____ end of the Ambu bag must be connected to the (color)_____ output of the O2 source.
9. What are the four "must haves" in a vent/trach patient's room?
10. Who is the 1st line responder?
11. What are the four items need at the bedside for a vented/trach patient?
12. The PIP has increased, what could cause this?
13. What is PEEP?
14. Name 4 things you can do as the nurse to help prevent VAP.
15. What % compliance with the bundled nursing interventions is needed to prevent VAP?
16. Do you need to suction the patient before turning, after turning, or both?

Pre & Post Vent/Trach Questionnaire

On a scale of 0 to 10, with 0 being entirely unconfident and 10 being completely confident, how would you rate your current confidence with ventilators and trach care/maintenance? _____

PRACTICE CHANGES

- ▶ All RNs required to attend

- ▶ Specific changes included:
 - ▶ Holistic and patient-centered care
 - ▶ Mobilization of secretions
 - ▶ Suctioning both orally and in-line before/after turns
 - ▶ VAP prevention techniques

- ▶ Management Support



RESULTS

Overall:

- ▶ 100% (N = 31) RNs attended
- ▶ Staff knowledge and confidence increased

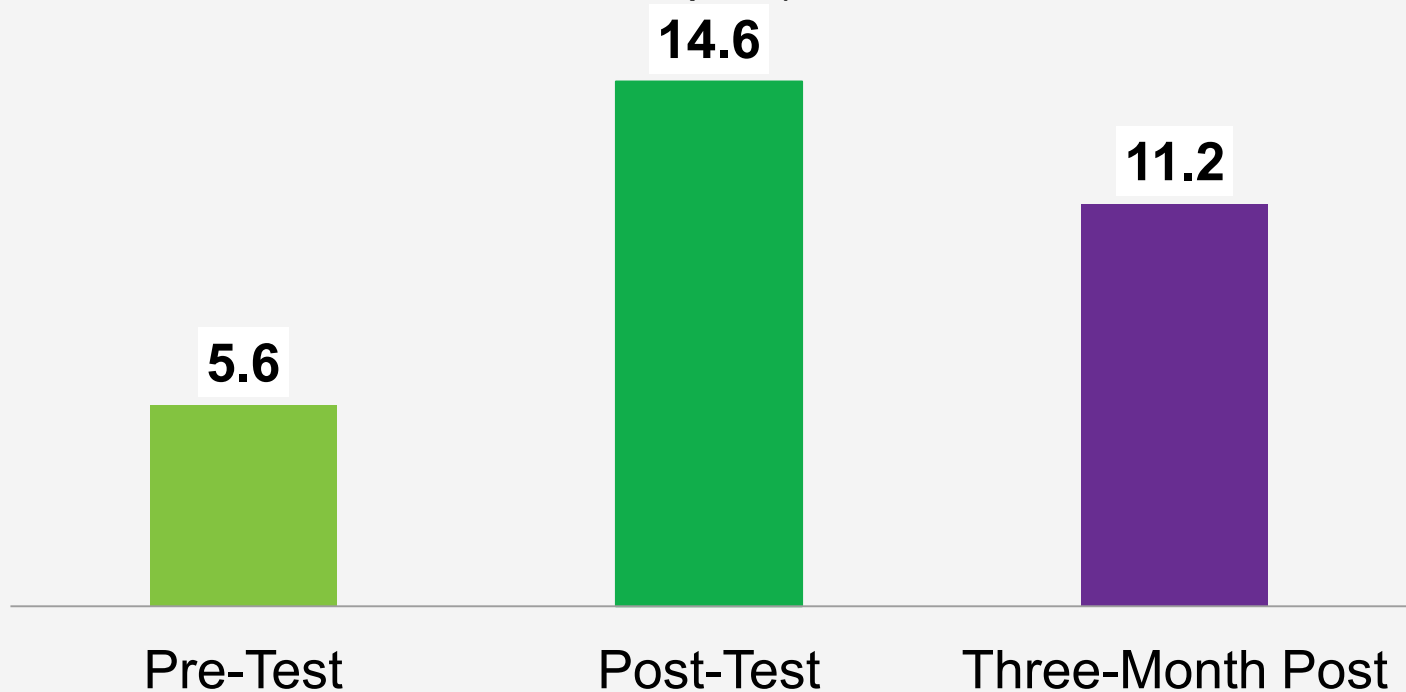


GRAPH 1: RN Knowledge



Average # of CORRECT questions on Vent/Trach Knowledge Test

(15 Questions total; N = 28 pre/post, N = 17, 3-month post)



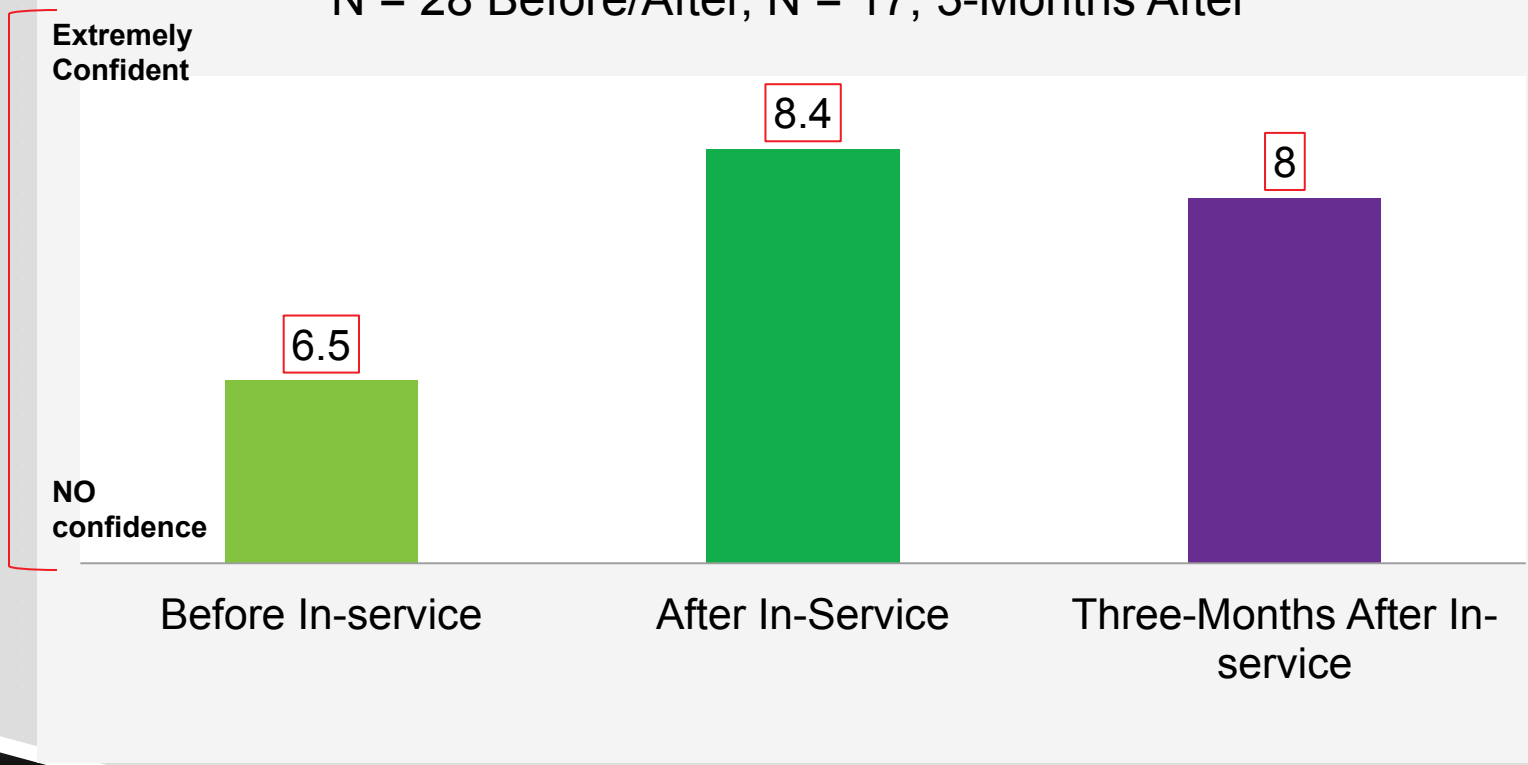
GRAPH II: RN Confidence Level



Average RN Confidence Level in Caring for Vent/Trach Patients

Likert Scale: 0 = No Confidence; 10 = Complete Confidence

N = 28 Before/After, N = 17, 3-Months After



PLANS FOR SUSTAINMENT

- ▶ Workgroup meeting 2014
- ▶ Yearly competency
- ▶ 45 minute competency check:
 - ▶ Questionnaire
 - ▶ Review
 - ▶ Three case studies

PDSA CYCLE -- MODIFICATIONS

- ▶ Requirement changes
- ▶ Vent/Trach supply checklist

Room Readiness: Care for the patient with Tracheostomy Tube Supply Checklist

Safety check upon admission & Q shift Responsibility: Interdisciplinary RT & RN	
Supply	Defined location
<input type="checkbox"/> Obturator	Taped to the wall at the head of bed
<input type="checkbox"/> Replacement tracheostomy tube (Shiley) one the same size, one one size smaller	On top of bedside cabinet
<input type="checkbox"/> Ambu bag	Hanging from O ₂ meter: ready for use at anytime
<input type="checkbox"/> Wall suction regulator with tubing	Ready for use at any time
<input type="checkbox"/> Tonsil (Yankaur) suction	Set up ready for use at any time
<input type="checkbox"/> Single use sterile suction kits	Bedside cabinet, top drawer
<input type="checkbox"/> Disposable inner cannula (if applicable)	Bedside cabinet, top drawer

Safety Mantra: *Everything in its place and everything has a place*

ENSURING SUCCESS

- ▶ Collaboration with experts
- ▶ Management support
- ▶ To maintain RN competence and confidence
 - ▶ An educational plan should be developed for new nurses
 - ▶ A yearly review should be provided
 - ▶ Resources accessible

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